



Datasheet for ABIN7490726

anti-CD5L antibody



[Go to Product page](#)

1 Image

Overview

Quantity:	100 µg
Target:	CD5L
Reactivity:	Human
Host:	Rabbit
Clonality:	Chimeric
Conjugate:	This CD5L antibody is un-conjugated
Application:	Flow Cytometry (FACS)

Product Details

Isotype:	IgG1
Fragment:	Fc fragment
Characteristics:	Rabbit/Human Fc chimeric IgG1
Purification:	Purified from cell culture supernatant by affinity chromatography

Target Details

Target:	CD5L
Alternative Name:	CD5L (CD5L Products)
Background:	AIM, API6, CT-2, hAIM, PRO229, SP-ALPHA, Spalpha, Description: Secreted protein that acts as a key regulator of lipid synthesis: mainly expressed by macrophages in lymphoid and inflamed tissues and regulates mechanisms in inflammatory responses, such as infection or atherosclerosis. Able to inhibit lipid droplet size in adipocytes.

Target Details

Following incorporation into mature adipocytes via CD36-mediated endocytosis, associates with cytosolic FASN, inhibiting fatty acid synthase activity and leading to lipolysis, the degradation of triacylglycerols into glycerol and free fatty acids (FFA). CD5L-induced lipolysis occurs with progression of obesity: participates in obesity-associated inflammation following recruitment of inflammatory macrophages into adipose tissues, a cause of insulin resistance and obesity-related metabolic disease. Regulation of intracellular lipids mediated by CD5L has a direct effect on transcription regulation mediated by nuclear receptors ROR-gamma (RORC). Acts as a key regulator of metabolic switch in T-helper Th17 cells. Regulates the expression of pro-inflammatory genes in Th17 cells by altering the lipid content and limiting synthesis of cholesterol ligand of RORC, the master transcription factor of Th17-cell differentiation. CD5L is mainly present in non-pathogenic Th17 cells, where it decreases the content of polyunsaturated fatty acyls (PUFA), affecting two metabolic proteins MSMO1 and CYP51A1, which synthesize ligands of RORC, limiting RORC activity and expression of pro-inflammatory genes. Participates in obesity-associated autoimmunity via its association with IgM, interfering with the binding of IgM to Fc α / μ receptor and enhancing the development of long-lived plasma cells that produce high-affinity IgG autoantibodies (By similarity). Also acts as an inhibitor of apoptosis in macrophages: promotes macrophage survival from the apoptotic effects of oxidized lipids in case of atherosclerosis (PubMed:24295828). Involved in early response to microbial infection against various pathogens by acting as a pattern recognition receptor and by promoting autophagy (PubMed:16030018, PubMed:24223991, PubMed:24583716, PubMed:25713983).

UniProt: [O43866](#)

Application Details

Application Notes: Flow Cyt 1:100

Restrictions: For Research Use only

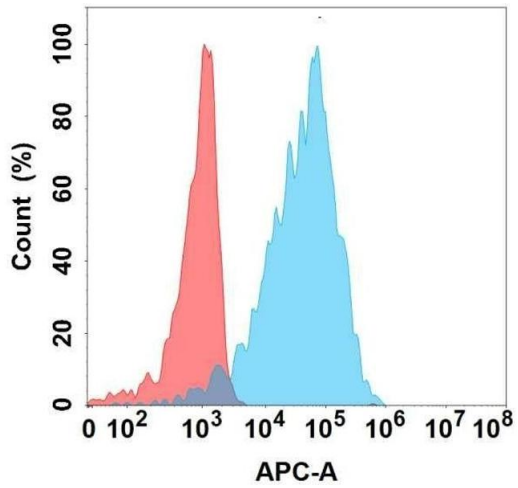
Handling

Format: Liquid

Storage: -20 °C, -80 °C

Storage Comment: Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing).
Lyophilized proteins are shipped at ambient temperature.

Expiry Date: 12 months



Flow Cytometry

Image 1. Flow cytometry analysis with Anti-CD5L on Expi293 cells transfected with human CD5L (Blue histogram) or Expi293 transfected with irrelevant protein (Red histogram).